

STATEMENT OF ANDRE SKALINA

I, Andre Skalina, hereby declare that the following statements are true and correct to the best of my knowledge, information and belief.

1) This statement has been prepared on behalf of WPIX-DT in support of its request to change the referenced antenna pattern for WPIX-DT contained in the post-transition DTV Table of Allotments proposed in the Seventh Further Notice of Proposed Rulemaking ("7th FNPRM") by the Federal Communications Commission ("FCC") in the ongoing DTV proceeding. WPIX-DT's request seeks to substitute the omni-directional antenna pattern from its licensed analog operation rather than the directional pattern specified in its maximized DTV construction permit.

2) I am the Vice President of R&D for the Dielectric Communications. I have 30 years of combined antenna and antenna system design experience with RCA and Dielectric. Prior to my present position, I was Dielectric's Senior Director of Antenna engineering. In that position, I received four patents for new broadcast antennas and antenna testing method.

3) One of my current responsibilities at Dielectric is to work with Metropolitan Television Association ("MTVA") in the design of the multistation broadcast antenna stack to be installed on the top of the new Freedom Tower. The Freedom Tower broadcast antenna stack is currently anticipated to serve 9 full-power DTV stations with separate main and stand-by antennas.

4) FCC approval of WPIX's request to change the referenced antenna pattern in the post-transition DTV Table of Allotments from a DA to an omni would eliminate a significant complicating factor in the design of the Freedom Tower mast. A WPIX omni antenna would allow the MTVA to combine all three high-band VHF DTV channels (WABC, WPIX and

WNET) into a single antenna. The flexibility to combine these three stations into one antenna is the preferred approach by the MTVA because it will greatly simplify the stack design.


5) The combined operation of the three high-band VHF stations will not have any significant effect the size of the antenna. Similarly, combining the three stations into two transmission lines is not an issue as far as power rating of the transmission lines is concerned, since the combining would bring the power to approximately 25 percent of full rating of the lines.

6) At the same time, the combined antenna will free up precious room inside of the Freedom Tower mast. Rather than a total of six transmission lines for the three VHF stations (each station needs two transmission lines for redundancy), the combined antenna would only require two lines thereby eliminating four transmission lines. From a design perspective, the importance of freeing-up room inside the mast cannot be overstated. Extra room inside the mast is needed to inspect and replace (if necessary) the components of the transmission systems operating on the mast.

7) Modifying WPIX's antenna pattern to an omni would also free up some "real estate" on the outside of the mast which would allow for a more optimized antenna design that would improve DTV service to the core of the New York City market. The current design of the Freedom Tower mast requires a six bays to accommodate separate, two bay antennas for the three high-band VHF channel. The six bay antenna occupies 30 feet on the vertical aperture of the mast. If the WPIX proposal is approval, the combined antenna would only require a four bay antenna and would only occupy 20 feet of the vertical aperture of the mast. Using a four bay antenna would also allow overtilt and thus increase the ERP and improve overall coverage in the core NYC market. Since a four bay antenna has a narrower beam width with a 3 degree beam

tilt, ERP could increase by 14 percent a distance of approximately 10 km from the tower. The required beam tilt for a two bay antenna would have to be 6 degrees to achieve the same ERP increase; however the maximum increase would be only 5 km away from the tower.

8) For all these reasons, we urge the FCC to approve the proposed change in WPIX-DT's reference antenna pattern from a DA to an omni.



Andre Skalina
Vice President, R&D
Dielectric Communications

Date:

1/25/07